

THE WATER QUESTION.

Facts for all the People.



Light will reveal truth and error. Intelligent agitation and discussion will help a good cause and kill a bad one.

The water question is up for final settlement. It is impossible to understand, much less to intelligently discuss or vote upon it without a knowledge of the facts contained in this paper. Nowhere else can be found so complete an epitome of the case at the present time. This is an endeavor to state

THE WHOLE TRUTH.

The amount of error and falsehood to be refuted is the sole excuse offered for the length of this paper. But time spent in a careful perusal of its contents will not be lost to those interested in Toronto's great Civic issue.

NOVEMBER 2nd, 1896.

The Aqueduct Company have offered to supply Toronto with water. The acceptance of this offer means: That

1. Toronto would procure an abundant supply of the purest water obtainable, which Mr. Mansergh declared would be a luxury too expensive to be entertained.
2. The guarantee for all time to come of an inexhaustible supply of pure cold water under high pressure.
3. The entire Waterworks system would be practically leased to the City for fifty years, renewable in perpetuity if the City desired it. The compensation to be adjusted at the expiration of each fifty year term, at the City's option. The system would always be under the immediate and absolute control and direction of the City's officials.
4. Toronto would have the cheapest water supply system in the civilized world.
5. The system would be maintained for all time to come at the Company's expense.
6. There will be no more addition to the City's debt on account of construction of Waterworks; no more costly mistakes.
7. The City would practically have under lease a superb water supply system constructed to order at a rental that would amount to less than one-half the interest that the City would have to pay if a similar system were to be constructed for water supply purposes only at the expense of the people.

ALD. PRESTON'S MOTION.

At a meeting of the City Council on Monday, Oct. 5th, 1896, Ald. Preston gave notice that he would move that

"Whereas this Council received a communication from the Georgian Bay Ship Canal & Power Aqueduct Company, bearing date the 5th day of May, 1896, offering to supply this corporation with water on the terms therein stated:

"And whereas this Council recognizes the right of every municipal elector to a voice in determining the final solution of this most important of all municipal questions, namely, the domestic water supply:

"And whereas this Council also recognizes the fitness and ability of the people to deliver an intelligent and final verdict in relation to this or any other question of public policy;

"Therefore be it resolved that the electors be asked, on the first Monday in January next, to pronounce by ballot for or against the acceptance of the general policy indicated by said offer, upon the understanding that, in the event of the people approving of the said policy, this Council reserve the fullest liberty to provide all necessary safeguards and details of any nature whatsoever in the public interest in respect of the proposed agreement."

This brings the water supply question again to the front—we all hope this time for a final settlement. To that end let every side of the question be thoroughly discussed, and let every public man and journal reserve judgment until all that can be said on either side has been respectfully heard and well considered.

DISTRUSTS THE PEOPLE.

The *Globe* and Ald. Spence claim that the people are not to be trusted in water plebiscites. They admit the competency of the people to speak on the rum question, and we are not compelled to drink rum or pay for it; but they claim that we are incompetent to deal with the water question, and we are all compelled to drink water and pay for it.

Ald. Spence says that the Referendum is un-British. There was a time within the memory of men now living when it was un-British for electors to vote by ballot, or even for the great mass of the people to vote at all. The term "un-British" as thus applied, is meaningless twaddle. The people of this country, and especially this city and province, are governed by their own good

sense, with the history and experience of mankind to learn from, and a thorough knowledge of their own wants and the immediate and future needs of a community whose circumstances are peculiar to this place and time.

It is impossible to argue from premises that every one will accept, but the people generally will agree that the first and greatest consideration is the absolute purity and the abundance of the supply. Toronto cannot afford to use

DEBATABLE WATER

the quality must be absolutely beyond suspicion or debate. The next consideration is municipal control, the supply must at all times be under the control of the officers and representatives of the people from the remotest intake to the water taps in every dwelling. The third consideration is cost.

With this understanding let us proceed:—

When the conduit pipe across the bay rose to the surface in the summer of 1895, the people of Toronto were thrown into a state of excitement and consternation. The authorities had to resort to the primitive watering carts as a means of distributing domestic water to the houses of the people. In the then state of public feeling it was determined to pay Mr. James Mansergh, C. E. (of London, England), \$15,000 for a report upon all possible sources of water supply for Toronto.

The public excitement that followed the publication of Mr. Mansergh's report has entirely subsided, and the press and public are now in a position to deal with the whole question in a more deliberate and neutral spirit.

Mr. Mansergh's report is a complete vindication and corroboration of the position contended for in connection with power development and water supply by gravitation. The gravitationists have always contended that Lake Simcoe water was at least equal if not superior to Lake Ontario water. Mr. Mansergh endorses that position most completely in the following words:—

"On the question of quality nothing more need be said than to repeat in a sentence that if the Lake Simcoe water is dealt with as I have just described, and if Ontario water—drawn from the present intake—is filtered, both of them, as delivered to consumers, will be high-class waters of unimpeachable character, with practically nothing to choose between them."

THE PUREST WATER.

In other words, Mr. Mansergh says that Lake Simcoe water unfiltered is equal to Lake Ontario water after filtration. This is in harmony with the finding of Messrs. Hering & Gray, which cost the city about \$10,000 in 1889.

In opening up the case let me say that the gravitationists accept Mr. Mansergh's report as a finality; that is, we accept his specific findings, as a high engineering authority, but we do not accept his irrelevant general remarks.

It is well to have some authority from which there can be no appeal, and the advocates of Lake Ontario as a source of supply might as well attempt to

GILD THE SOVEREIGN

or paint the lily as to seek to "add a cubit" to the report of the costly English expert.

Let us qualify this acceptance of Mr. Mansergh's utterances.

We accept him as an eminent engineer at the very head of his profession, and when he speaks in that capacity we accept him as a final authority, but when he goes out of his way to tender unsolicited advice on questions of public policy we call a halt, for the average elector of the city of Toronto has a better knowledge of local conditions, especially financial conditions, than a gentleman who spent

ABOUT TWO SHORT WEEKS

in our midst. His gratuitous unsolicited opinion on questions of public policy and his opinion of our public men and corporations, and especially his opinion of schemes, the merits of which he admits that he did not investigate, simply amounts to profound egotistical impertinence.

In accepting Mr. Mansergh's report as a finality we have the practically unanimous endorsement of the Toronto press, as will be seen by the following editorial utterances:

Evening Telegram Editorial, March 4, 1896.

"The report of James Mansergh, C.E., brings the question of the city's water supply out of the mists of assertion and contradiction of theory and dreams into the clear light of facts and figures.

"The admissions of Mr. Mansergh as to the practicability of getting water from Lake Simcoe surprise those observers who insisted that the gravitation system was an engineering impossibility. His conclusions favorable to the purity of Lake Simcoe water is at variance with a generally expressed opinion that Lake Ontario water is to be preferred, both chemically and financially.

"Regrets are vain. The city, thanks to the folly of the sovereign voter, has lost financial power to bring water from the north and it must needs accept the advice of Mr. Mansergh.

Mail and Empire Editorial, March 4, 1896.

"After considerable delay, the report of Mr. Mansergh on the water supply of Toronto came to hand yesterday, and proved itself to be a document worth waiting for. It manifests the ability, the acumen, and the profound engineering knowledge and experience of its author in a very startling way. Ex-Alderman Shaw, whose idea it was to get a report on the Toronto water supply from the foremost waterworks expert in the world, and the City Council that took up the happy inspiration and carried it out successfully, are to be congratulated on their public spirit and judgment. The report will be of the greatest use to the young and rising engineers of this continent, and it is to be hoped that it will be printed and widely circulated not only among our own citizens, but in other places where the water problem from time to time presents itself. It is a model of clearness and of arrangement, and the citizen who masters it may be considered at least able to vote intelligently on the water question.

"Mr. Mansergh's remarks on the sewage question derive a certain force from the fact that they were not asked for, and that they come as a spontaneous remonstrance or recommendation from an expert who could not see our present system of pouring defilement into a land-locked harbor without warning us as to the consequence."

World Editorial, March 4, 1896.

"The important feature of Mr. Mansergh's report is that he recommends us to adhere to our present source of supply. He does so for the simple reason that it is much cheaper than the Simcoe project.

"It is admitted that Lake Simcoe can supply more water than Toronto will ever need, and it is further conceded that Lake Simcoe water is all that could be desired.

As between the quality of Ontario water, delivered as Mr. Mansergh proposes, and that of Lake Simcoe, there is "practically nothing to choose between them." They are "both high class waters of unimpeachable character." The problem is altogether one of cost. The diagram of annual charges accompanying the report discloses at a glance the great difference there is in the two projects, extending over a series of years. At the end of eighty years the annual charges involved in the two schemes become identical, but for the first fifty years the pumping scheme is so much smaller than the gravitation scheme that there can be no hesitation in selecting the one that should be adopted by Toronto. If we calculate fifty years ahead the pumping scheme is much the preferable one. If we calculate eighty years ahead it is immensely the cheaper of the two.

"The only question left for us to decide is whether we are able to undertake the big expense involved in the Lake Ontario project. It involves a big capital expenditure, viz., \$5,685,312, which is considerably in excess of what was generally anticipated, but it is spread over a long series of years, and in the event of our population not increasing according to calculations, it will not all be required. The great item of expense in the pumping system is the construction of filter beds, which involve a capital outlay of over two million dollars in the fifty years estimate."

Globe Editorial, March 4th, 1896.

"Mr. Mansergh measures the two systems by comparing the cost of each from 1896 to 1948, the total cost by gravitation being \$23,967,447, equal to 3.96 cents per 1,000 gallons, while by pumping the total cost during that period would be \$15,383,406, or 2.54 cents per 1,000 gallons.

"It may be said, therefore, that the aldermen, ought to be able, in view of the eminent expert's opinion, to banish all doubts from their minds and set to work forthwith to carry out gradually as required the various branches of a well-thought-out scheme, which will ultimately give Toronto one of the best systems of waterworks on the continent."

The foregoing shows that Mr. Mansergh's recommendations are accepted by the Toronto press with an unanimity seldom seen. The *Globe* urges the City council "to set to work forthwith" to carry out Mr. Mansergh's recommendations in their entirety.

BASIS OF COMPARISONS.

The statement of half truths is the parent of controversies. Let us get at the whole truth at once. If the present water supply system is satisfactory and final, the com-

pany's offer cannot be entertained. Ald. Preston in a letter published in the *Globe* of October 16th, 1896, said:

"In the first place, the resolution submitted to the Council, while proposing a plebiscite on the question of the water supply, demanded provisions for such "safeguards" as the interests of the city required.

The *Globe* editorial elaborates at length upon the difference between the amount suggested by the Aqueduct Company and the annual cost incurred for pumping at present, as if I had argued in favor of the former as against the latter.

I endeavored to make myself understood as being opposed to even considering the offer of the Aqueduct Company, on account of the expense, unless it was intended to act upon the recommendations of Mr. Mansergh. But if an expense of five millions (or three millions by 1901) was to be incurred in improving the present system, or twelve millions, as in his Lake Simcoe scheme, then I was prepared to submit the Aqueduct Company's offer to the people, believing it cheaper and less burdensome in every way. I freely admitted that I could hardly believe \$15,000 had been expended for a condemnation of the present system unless improvements were contemplated.

The *Globe* editorial condemns a supposed willingness, or intention, of handing over the control of the city water supply to a company. I was equally emphatic in my objection to such a course. In the event of an arrangement being arrived at with the Aqueduct Company I stated that the city officials must have complete and absolute control of the suggested waterworks system from Lake Simcoe, free from any interference on the part of the company. That arrangement could be effected without prejudice to their other works.

The expression regarding the character of the water was in your columns withdrawn from its context. There can be no question about the purity of the water in Lake Ontario, but I have no hesitation in affirming that there is no city on the American continent having the reasonable opportunities that are here for absolutely pure water that would submit to the constant danger of their own diluted sewage entering into domestic supply. I read figures that can be verified at the Medical Health Department, showing the impurity existing from time to time incident to the disposal of sewage, and the criminal indifference regarding its effect upon the water supply. Occasionally the citizens are provided with pure water, but frequently it would be flattery to call it diluted sewage. Following a strong northwest wind or a heavy rain storm, increasing the flow from the sewers and the Don, the water in the bay is forced out in the lake, with the result that it finds its way to the intake and then forced into

the city. The mains running north and south are kept comparatively free. In the one case the sediment either reaches the reservoir, where the filthy accumulation of twelve months needs no scientific analysis to prove its character, or into the mains running east and west, where it lies unless frequently removed by the blowing out of the hydrants. I say unhesitatingly, with all due regard for my "oath of office," I doubt whether there is a parallel situation on the continent of America."

In an attempt to reply to Ald. Preston's letter the *Globe* said:

"As to the main contention there seems to be no difference between Ald. Preston and the *Globe*. The Alderman says if the city is going to spend three millions before 1901 on extending the present system along the lines of Mr. Mansergh's report he should like to have a vote of the people so that they may decide between Lake Ontario or Lake Simcoe by civic operation and Lake Simcoe by the Aqueduct Company's offer. **So far as we have seen no one has proposed to spend three millions before 1901 on the Mansergh plans.**

When Council sets itself seriously to the raising of three millions to carry out the Mansergh project or even half a million for the tunnel across the bay, which is the first step toward the improvement of the present system, it will be time enough for Ald. Preston to bring forward the alternative project of an aqueduct to Lake Simcoe.

If at any future time the advantage rests with Lake Simcoe the people of Toronto can and will build their own aqueduct."

The *Globe* itself, on the 4th of March, proposed to proceed "forthwith" to carry out Mr. Mansergh's recommendations; and on October 16th it said. "So far as we have seen no one has proposed to spend three millions on the Mansergh plans."

Can it be that there are two *Globes*, and that we have confounded them.

The *Globe* and other papers quite overlooked one

ABSOLUTE BAR

to the city undertaking either the \$12,000,000 gravitation scheme or the \$5,943,750 Lake Ontario pumping scheme. The bar referred to is the absence of the necessary means. If the ratepayers would vote either sum,—and they would not—and if the city's credit would stand the strain—and it could not—there would still be a legal bar, for

according to law the city's borrowing power is practically exhausted.

The Legislature has enacted that the city may borrow twelve per cent. on the first one hundred million dollars of assessment, and eight per cent. on the assessed value over the one hundred million dollars. The assessment for 1896 is \$132,000,000. The legal limit is therefore \$14,560,000. We have availed ourselves of our right to borrow to the extent of \$11,750,725, and if our people were willing, and the public creditor ever so anxious to increase the debt, we could only raise

\$2,809,275,

and if we adopt Mr. Mansergh's cheapest plan we would have to make provision at once for borrowing \$3,376,687, an amount exceeding the legal limit of our borrowing power by \$567,000.

In view of these facts is it not the most malicious sophistry or dense ignorance on the part of Ald. Sheppard to talk of the city borrowing money at three per cent. The fact is the money could not be borrowed at all by the city, but if it were possible to get it, the rates would be simply ruinous. But Ald. Sheppard has always been strongly opposed to the prosecution of this enterprise.

Mr. Mansergh and Messrs. Hering & Gray all agree that Lake Simcoe water is superior to Lake Ontario water, but they recommend the latter **SOLELY ON ACCOUNT OF THE GREAT COST OF PROCURING A SUPPLY FROM THE FORMER SOURCE.** Mansergh makes the cost of carrying out the Lake Simcoe plan (on account of capital) to be \$12,000,000. In order to get Mr. Mansergh to report this fabulous sum as the probable cost (so that he could condemn it), the Yonge Street route was adopted, which according to his report, entails 34 miles of tunnelling. Had Mr. Mansergh adopted a route by way of Peterboro, or Hamilton he could have made the cost \$50,000,000, or even more. The route approved by Hering & Gray and adopted by the Aqueduct Company only involves a tunnel or open cut of seven miles, against Mr. Mansergh's 34 miles. Mr. Mansergh helps to make up his estimated cost of

\$12,000,000 by allowing a trifle of \$1,500,000 for engineering expenses. Presumably he is under the impression Toronto is going to employ a hundred Manserghs, at \$15,000 each. That certainly would consume the million and a half allowed for engineering expenses. Hering & Gray reported that the Lake Simcoe scheme would cost about \$7,500,000. The work can be done now in connection with the company's

OTHER WORKS

for a little under one-half the latter sum.

The aqueduct company have in view this absolutely sure and certain source of revenue, namely, contracts to supply the reservoirs of the City of Toronto and other municipalities with water. This will yield the company a minimum revenue of \$219,000 per annum, which will pay interest on a capital of about \$5,500,000 at 4 per cent. The extra cost of completing the water supply system will be less than \$3,500,000. The reason why the work can be done at this low figure is that it will be done in connection with the power development feature of the enterprise, which will reduce the cost by less than one-half.

SURVIVAL OF THE FITTEST.

The citizens of Toronto and vicinity are pre-eminently a practical and common-sense people, and the company will inevitably secure these profitable contracts—profitable alike to the company and the public—no false, artificial sentiment can delay the operation of the immutable laws of commerce and the survival of the fittest for any considerable time. The laws of commerce and sanitation alike demand that Lake Ontario be abandoned as a source of domestic water supply, especially since the high-priced expert has so clearly demonstrated the absolute superiority of Lake Simcoe water. The condemnation of Lake Ontario water is most complete, and its use for domestic purposes ought to be prohibited by the Provincial Board of Health, unless it be first thoroughly filtered, as recommended by Mr. Mansergh.

In May last an offer to the following effect was submitted to the corporation of Toronto:—

The company to supply thirty million gallons of water daily of a high standard of purity for \$219,000 per annum, and one cent per 1,000 gallons for all that might be required over that amount. The city to deduct the first \$226,000 that may be due the company to lay large supply or feed mains throughout the city, that have been recommended by the City Engineer, such mains to be the absolute property of the city.

The water is to be delivered to the present city reservoirs, or the company will construct an additional reservoir or reservoirs (not more than two) at any elevation or elevations that the city may require, not exceeding 400 feet above the level of Lake Ontario, and deliver the water to such new reservoir or reservoirs as the city may require, such new reservoir or reservoirs to remain the property of the company.

The company at its own cost to lay all pipes and make all connections between the several reservoirs and your distribution mains at the city limits.

The water to be procured from Lake Simcoe by means of gravitation, and to be of the best quality obtainable from that source, such water to be specially reservoired as recommended by Mr. Mansergh, before delivery to any of the city service reservoirs.

The whole waterworks system for supplying water to Toronto, including all reservoirs, intakes, conduit pipes and tunnels, to be at all times under the direction and control of the City Engineer.

NEW SYSTEM BY 1898.

The company to have the new system in operation and the city supplied not later than the 31st day of December, 1898, provided the agreement be entered into not later than the 1st day of March, 1897.

The agreement to be for a term of 50 years from the 1st day of December, 1898, the city to have the option of terminating the contract or having the rates and charges readjusted by arbitration at the expiration of the said term.

Before sending the above to the corporation it was submitted to Mr. Arthur Harvey, the well-known actuary. Mr. Harvey was requested to give the result of a comparison between the company's offer and the plan

recommended by Mr. Mansergh after a most complete analysis of the two schemes. The following tables contain the gist of the report of the eminent expert:—

Saving in the initial stage by adopting Mr. Mansergh's plan.

1890.....	\$34,817
1900.....	33,184
1901.....	31,511
1902.....	16,226
1903.....	14,386
1904.....	12,455
1905.....	10,608
	\$153,186

Saving in the later stage by contracting with the Aqueduct Company.

1906.....	\$ 197
1907.....	2,181
1908.....	4,279
1909.....	6,276
1910.....	8,383
1911.....	10,536
1912.....	12,805
1913.....	14,961
1914.....	17,238
1915.....	19,563
1916.....	22,026
1917.....	33,218
1918.....	35,089
1919.....	38,308
1920.....	40,867
1921.....	43,497
1922.....	46,074
1923.....	68,580
1924.....	68,459
1925.....	68,769
1926.....	77,712
1927.....	77,821
1928.....	77,693
1929.....	78,031
1930.....	73,133
1931.....	78,225
1932.....	78,104
1933.....	87,323
1934.....	87,445
1935.....	87,556
1936.....	87,402
1937.....	106,430
1938.....	106,550
1939.....	106,679
1940.....	115,371
1941.....	115,799
1942.....	115,930
1943.....	116,066
1944.....	115,890
1945.....	125,088
1946.....	125,351
1947.....	125,501
1948.....	125,310

\$2,857,215

SAVING OF NEARLY \$3,000,000.

Mr. Harvey further states: "In the 50 years there would be \$2,704,029 more paid by the city for interest on capital expended and expense of pumping, etc., than would be paid under the method proposed by the Aqueduct Company.

"No account is taken in these tables of interest to be paid under Mr. Mansergh's plan, during 1896, 1897 and 1898, on the \$2,689,562 to be expended in those years. Mr. Mansergh states that this, at 5 per cent. for interest and redemption, would be \$256,083, so that the interest may be taken to be \$204,867 (4 per cent.) and added to the saving given in the second table."

If the city retain Lake Ontario as a source of supply a trunk sewer will have to be constructed, which, according to the report of ex-City Engineer Mr. W. T. Jennings, will cost \$1,632,658; the interest alone on this sum at 4 per cent. would be over \$63,300 per annum. The trunk sewer would be quite unnecessary if the water supply be taken from the north.

Another item of advantage that would accrue to the people by reason of a supply from the north would be greatly reduced

FIRE INSURANCE RATES

owing to the practically illimitable water supply at a greatly increased pressure; it is impossible to estimate accurately what this saving would amount to, probably upwards of \$250,000 per annum, certainly not less than \$100,000; add the interest on cost of trunk sewer to the estimated saving in fire insurance rates, and we have an annual saving of \$165,800, which ought to be included in Mr. Harvey's table.

Including these two items, the citizens would during the 50 years save a total of \$10,869,029 by procuring a supply from the company as against Mansergh's plan.

If the saving thus shown should be invested each half-year at 4 per cent., the value of the savings alone, with interest compounded half-yearly, would be over \$35,000,000 at the expiration of the proposed contract.

A contract on the above basis would give

the company a minimum revenue of \$219,000 per annum, a sum nearly sufficient to pay interest on \$5,500,000, at 4 per cent; this sum would increase with Toronto's growth, it would be greatly augmented in the immediate future by reason of similar contracts with many other local municipalities from the same system, without any further expenditure, except for the making of connections with the company's works.

MANSERGH'S FINDINGS.

1. Mr. Mansergh reported Lake Ontario water from our present intake to be unfit for drinking, unless it be first thoroughly filtered.

2. He further declared that Lake Simcoe water unfiltered is equal to Lake Ontario water after the latter is filtered.

3. According to Mr. Mansergh's own figures this Lake Ontario water will cost Toronto over two and a half cents—2.54—per 1,000 gallons (on the average for a supply of water, if his recommendations be adopted.)

And yet the company offers to supply the city reservoirs with Lake Simcoe water at the rate of TWO CENTS per 1,000 gallons for the first thirty millions, and ONE CENT per 1,000 for all over thirty millions per day.

ADVANTAGES OF GRAVITATION.

1. The adoption of the Gravitation System would give the people an abundant supply of water for all purposes.

2. The purity of the supply would be beyond question.

3. It would facilitate the total abolition of water rates by reason of the cheap and abundant supply.

4. It would obviate the necessity of a trunk sewer.

5. It would greatly reduce fire insurance rates, by giving a volume and pressure that could be procured in no other way.

6. The danger of the System breaking down would be reduced to a minimum.

7. It would add value to all public and private property.

8. It would tend to promote the cleanliness, health and beauty of our city.

9. Under the proposed agreement the City would exercise the same absolute supervision and control over the entire water supply system that it does now.

10. The citizens of Toronto would have the cheapest water supply system in the world.

THE TRUNK SEWER.

We have discussed Trunk Sewer (spasmodically) for over twenty years, the object being to prevent contamination of the water supply and the terrible sickening pollution of our land-locked harbor that must follow from making it a receptacle for the sewage of 200,000 people. This apparently unsolvable problem will solve itself immediately upon the adoption of a gravitation system, as the pipe we now use in an endeavor to get water from Lake Ontario can then be used to force our sewage out into the deep waters of Lake Ontario at a nominal cost.

The new system would greatly lighten the

BURDENS OF THE MASSES.

Under the present civic ordinance (schedule A, By-law 3,372) it costs for a seven-roomed house with five inmates \$6, and \$5 extra for bath and closet, or a total of \$11 gross, 20 per cent. off for prompt payment would bring the net rate to \$8.80 per annum. The assessment for a seven roomed house would average about \$1,500, and if the water rates were collected with the general taxes, the amount to be raised would be \$359,000, or less than three and three-quarters of a mill on an assessment of \$132,000,000, or less than

\$4.13

for a seven-roomed house and five inmates under the new system, as against \$8.80 under the present system, but under the proposed agreement the city would have thirty million gallons per day as against a very doubtful seventeen millions per day now. Under the proposed agreement each citizen could use water without stint, and none would be wasted. The water that escaped the taps would flush and purify the sewers, and improve the sanitary condition of the city. Fountains could play in every park and on every public square, and our city be a model of health and beauty, and beauty has a cash value.

NO METERS.

We do not want meters. They cost from \$15 to \$20 each to put in. They cost

the consumer 75c. quarterly (\$3.00 a year) for inspection. The best sanitary conditions are promoted by the free and abundant use of pure water; meters tend to restrict consumption and militate against cleanliness and health.

The following is from an editorial in the *Toronto World* of October 1, 1896:—

"At the annual meeting of the British Institute of Public Health, which this year met in the City on the Clyde, the Lord Provost made this statement of Glasgow's advance in sanitation:—

"In 1817 Glasgow had a population of 320,470, and a death rate annually of 56 persons out of each 1,000. In 1893 the population was 687,800, and the death rate only 22 per 1,000. This great change was due entirely to sanitation—to the introduction of pure water, to improved drainage, to rebuilding the slum districts, to opening fever hospitals, to parks and play grounds for children, and to cleaner streets."

The meter rate for water per 1,000 gallons is as follows in the several Cities specified:—

	Per 1,000 gallons. Cents.
Chicago.....	8
Burlington, Vt.....	40
Cambridge, Mass.....	30
Cincinnati.....	15
Columbus, Ohio.....	20
Evansville, Ind.....	25
Fall River, Mass.....	30
Hartford, Conn.....	30
Holyoke, Mass.....	15
Lynn.....	25
Lawrence.....	30
Louisville.....	15
Marshalltown, Iowa.....	40
Ottumwa, Iowa.....	30
New Albany, Ind.....	15
Newark, N. J.....	13
Portland, Me.....	50
Providence, R. I.....	30
Rochester, N. Y.....	25
St. Paul, Minn.....	50
Syracuse, N. Y.....	40
Utica.....	20

These cities are all in the United States, and therefore the word gallon, which means United States gallons, contains but eight pounds, while the Canadian or Imperial gallon contains ten pounds; therefore, an Imperial gallon is equal to one and one-quarter of the United States gallons. The meter rate for Toronto is fifteen cents per 1,000 Imperial gallons, with a discount of 20 per

cent. off for prompt payment, making the net rate twelve cents per 1,000 Imperial gallons, or a fraction over ten and one-half cents per 1,000 United States gallons. If Toronto were to be supplied by gravitation from the north there is no good reason why our rate should be more than half the Chicago rate, which is only eight cents per 1,000 gallons, the lowest rate by far of any city in the United States.

By accepting the company's offer Toronto could deliver water to the people even below the Glasgow rate, giving Toronto the unique and blessed distinction of possessing the cheapest water supply system in the world.

The net waterworks debt after deducting \$200,000 of sinking fund now on hand is approximately \$3,500,000. Therefore, the annual cost of water to the people under the proposed control would be as follows:—

Interest on above at 4 %.....	\$140,000
Annual cost of collection and revenue department.....	25,100
Annual payment to company.....	219,000

Total per annum..... \$384,100

Six thousand five hundred and seventy million gallons per annum (eighteen millions per day), would cost fifty-eight dollars and forty-seven cents per million, or a fraction under six cents per thousand gallons; and the corporation would have twelve million gallons of surplus water available for flushing sewers and other sanitary purposes. The meter rate for Toronto is fifteen cents per thousand gallons, with a discount of twenty per cent. off for prompt payment, making the net rate twelve cents per thousand gallons. With the growth of the city the cost of water would constantly proportionately decrease.

If water rates and the revenue and collection department should be abolished, and water rates collected as part of the general taxes, a saving of twenty-five thousand one hundred dollars could be effected, that would reduce the average cost to the people to less than five and half cents per thousand gallons on the basis of eighteen million gallons daily consumption, as against the present rate of twelve cents net; but the city would get thirty million gallons daily and it would

cost less than three and a half cents per thousand gallons, including interest on the present waterworks debt, and save other expense.

PRESENT PROFITS.

Some of the aldermen and a section of the press seek to make it appear that the people are making a profit out of our present waterworks system. This is nothing less than a willful perversion of the truth and clearly intended to deceive the people. If we sold water to the people of Hamilton or any other municipality at a price exceeding the cost of pumping and other expenses, that would be a real profit, but to charge Toronto citizens more than the water costs is analogous to the case of a man getting rich by charging his wife, children and servants high rates for board and shelter and paying the rates himself. The amount taken from the people in excess of the actual cost is not a profit but a most direct, unjust and burdensome tax upon the masses. Water is as necessary to life as air, and for Ald. Sheppard to tax the people for water to relieve the real estate of his millionaire friend and patron (Mr. Alexander Manning), is a crime against humanity and civilization.

The City Treasurer's reports for years back have shown a surplus of revenue over expenditure. For the last four or five years it has averaged about \$40,000. This alleged surplus has been entirely consumed for several years back in extraordinary repairs to the conduit across the Bay. Let us see how this so-called profit is made up. We charge:

The Public School Board	\$ 960
The Separate School Board . . .	290
General Hospital	439
Fire Depart., Police Board, street watering and other	
City departments	87,000

Total \$88,689

That is, the City charges the City about \$90,000 a year for water. This is a mere

PADDING AND STUFFING

of the public accounts, in order to deceive the people, and make it appear that the

department is not only self-sustaining, but that it yields a profit. When profits can be made so easily, why not increase the price to the departments and have a larger profit? We could show a million dollars of a surplus that way just as easy as \$40,000. In fact, there is no limit to the profits we might make (out of ourselves) without costing a cent more. The whole system is a most palpable, wasteful fraud upon the people, and has been from its inception.

GLASGOW METHODS.

A great deal has been said by the press in commendation of the system of municipalization of franchises by the City of Glasgow (Scotland). It is claimed that the revenue from the Water Works Department and rents, tolls and revenues from other franchises is now sufficient to defray the cost of civic government, without making the usual levy upon the realty of the people. Let us consider if this is a cause for rejoicing or not.

TAXING INDUSTRY.

There are innumerable forms of taxation, but there are only two great basic principles underlying all forms and systems. One is a tax upon land, and the other is a tax upon industry (the product of labor). If it is not one form, it is most assuredly the other. Glasgow is now in a position to exempt her rich landlords by charging the industrious population of that city for water, heat, light and street car service, an amount far in excess of the cost of these services. In the light of modern thought and tendencies.

THIS IS A CRIME.

By all means confine the Glasgow system to the old world—to Glasgow if possible.—We certainly do not want the Glasgow system on this side of the Atlantic. There can be no objection to any municipality operating its own franchises for the advantage of the people; in fact it ought to be done in all cases where it can be done at less cost and more efficiency; or even if the conditions are equal, but municipalization of franchises ought not to be a fetich and

worshiped blindly. It is a good rule to act upon and should not be departed from unless the exception is demonstrated by undoubted evidence to be much more in the public interest, as in this particular case. But in the municipalization of any franchise it ought not to be converted into a new indirect way of levying more taxes upon the industry of the people. Nothing more than the bare cost should be exacted for any public service, and any mention of profit should be frowned down with a unanimity that would forever prevent its recurrence.

COLD WATER.

It has been urged that the water that would be delivered from the north would not be as cold (in summer) as that now taken from the present intake, which is many feet below the surface of the Lake. The water from the north will be quite as cold as water from Lake Ontario after the latter is pumped into the Island reservoir and filtered, as proposed by Mr. Mansergh.

PUBLIC COMPETITION.

Some of the Aldermen and newspapers who trusted to Mr. Mansergh's report for a condemnation of gravitation, are disappointed at the complete vindication of Lake Simcoe and its manifest superiority over Lake Ontario as a source of supply. They now say "If Lake Simcoe is to be our source of supply, the work must be constructed by the city, or if a contract be given to a company, it must be put up to open public competition." That sounds well, but it is

MOST FALLACIOUS.

It has already been shown that the city could not possibly raise the money as a corporation to carry out such a work, but if the money could be raised the city has no power to go farther than thirty miles for water. Lake Simcoe is forty miles from Toronto. No doubt legislation could be secured authorizing the city to go farther, but if the city had the money and the necessary legislative sanction, it would still be

criminal folly to waste millions of the people's money unnecessarily. The greatest physical difficulty to be overcome in diverting water to the south from Lake Simcoe is

THE KING RIDGES.

Mr. Mansergh says it would cost over twelve million dollars to procure water from Lake Simcoe as a civic work, apart from any other enterprise. This is simply prohibitory, as the interest alone on twelve million dollars would amount to \$480,000 a year at four per cent., as against the company's offer of \$219,000 per annum for a similar supply. There are several reasons why the company can supply the water from Lake Simcoe at much less than one-half the cost of the Mansergh plan. In the first place the company have adopted a route where the ridges are very narrow, where there would be only seven miles of cutting as against Mr. Mansergh's thirty-four miles of tunnelling. In the second place the company will cut through the ridges for power development and ship canal purposes (whether the company get the water contract or not). When the cut is made through the ridges the company will be able to lay pipes alongside the canal. With these

UNIQUE ADVANTAGES

It would not be necessary for the company

1. To make any further cutting any more than would be necessary for laying pipes on an ordinary street.

2. To purchase any additional right of way.

3. To pay any additional damages to owners for injury to riparian rights. All of these claims will be settled in connection with the Ship Canal and Power Development works.

The company have these same advantages over the city and would have them over any other company that might hereafter be incorporated. Public competition under these circumstances would be most formal and farcical. The route that the company has adopted and preempted under their Act

of Parliament is the only practicable route, and many millions of dollars cheaper than any other.

Those who object to the acceptance of the company's offer are determined that Toronto shall not pay toll for water to a private company. This argument loses all its force when we realize that the present pumping system—or any extension of it—involves the continuous and wasteful payment of toll in perpetuity to the

RICH COAL BARONS

of a foreign country in the form of purchase money for coal. Since we must pay toll in any case, surely we should adopt the system that will give the best results for the least toll.

THREE PHASES.

To sum up the whole subject, there are but three vital points to be considered in relation to domestic water supply.

The first is the purity and volume of the supply. We must have water of undoubted purity and an abundant supply at any cost. Lake Simcoe meets the demand, both in respect of purity and unlimited quantity.

The second feature is municipal control. The company's offer meets this demand most fully.

The third vital phase is the question of cost. In this respect the choice of the people is confined to the company's offer and Mr. Mansergh's plan. A glance at Mr. Harvey's tables will be sufficient to determine the result. The company's offer is directly many millions of dollars better than the alternative, and indirectly the former is immeasurably better than the latter.

There are many other considerations involved, such as greater fire pressure, sewer flushing, etc., but the Lake Simcoe plan meets every phase of the question much better than the alternative, but such a contract as is proposed would be of

INESTIMABLE VALUE

to the company at this early stage of its

great enterprise. It would form a basis of credit that would enable the company to proceed with the work on a scale that it could not otherwise do. This would mean that hundreds, yes, thousands, of our citizens and their families would escape the terrible conditions that follow the enforced idleness of

THE BREAD-WINNERS.

It would mean that millions of dollars of private capital would be put in circulation, and Toronto and vicinity would at once be in a very great measure relieved from the terrible world-wide depression caused by the great social and industrial revolution that society at large is now undergoing.

The acceptance of the company's offer would insure the speedy completion of the ship canal and power development features of the company's work. These works would give employment to thousands of men during construction, but unlike other great works its completion would not leave upon our hands an abnormally congested labor market, as the use of the power to be developed would give continuous employment to more persons than would be engaged in the construction.

Mr. L. E. Cooley, the great engineer, claims that one horse power of water will employ directly and indirectly from 3 to 5 persons. The power aqueduct will develop over

400,000 HORSE POWER

in and about Toronto, which, according to Mr. Cooley's rule, would mean an increase of over a million in our population. Why do we judge ourselves unworthy of these great blessings? Why should ignorance and lack of faith be such a bar to our progress and development? We would have no just cause for complaint if we were to be dealt with according to our faith, and our city and country be allowed to decay of

DRY ROT

while other peoples avail themselves of natural advantages that we reject and without which we cannot compete with the world.

The Aqueduct Company is not in any sense a charitable organization, nor is this reference to the laboring man's interests intended as an appeal to the charitably inclined. The primary object of the company is to make money for its shareholders, and not to

"GIVE WORK."

Reference to the unemployed is not, as has been urged, a mere playing upon the feelings of a distressed community. It is on the other hand a legitimate phase of the question to be considered by the community, particularly since it has been clearly demonstrated that the company is entitled to the contract it seeks, according to every commer-

cial, sanitary and economic law known to men.

Let the company and the people have the legitimate advantage that would immediately flow from a declaration of policy by the people on this question. The matter is now before the people, which is the court of last resort. This is most essentially a

PEOPLE'S QUESTION.

We all drink water and directly or indirectly we all pay for it.

Let the people speak and let their verdict be final.

REPETITIONS.

The following are repetitions of portions of the foregoing, and are repeated to emphasize the points referred to :

THE TRUNK SEWER.

We have discussed Trunk Sewer (spasmodically) for over twenty years, the object being to prevent contamination of the water supply and the terrible sickening pollution of our land-locked harbor that must follow from making it a receptacle for the sewage of 200,000 people. This apparently unsolvable problem will solve itself immediately upon the adoption of a gravitation system, as the pipe we now use in an endeavor to get water from Lake Ontario can then be used to force our sewage out into the deep waters of Lake Ontario at a nominal cost.

MANSERGH'S FINDINGS.

1. Mr. Mansergh reported Lake Ontario water from our present intake to be unfit for drinking, unless it be first thoroughly filtered.
2. He further declared that Lake Simcoe water unfiltered is equal to Lake Ontario water after the latter is filtered.
3. According to Mr. Mansergh's own figures this Lake Ontario water

will cost Toronto over two and a half cents—2.54—per 1,000 gallons (on the average for a supply of water, if his recommendations be adopted.)

And yet the company offers to supply the city reservoirs with Lake Simcoe water at the rate of TWO CENTS per 1,000 gallons for the first thirty millions, and ONE CENT per 1,000 for all over thirty millions per day.

The new system would greatly lighten the

BURDENS OF THE MASSES.

Under the present civic ordinance (schedule A, By-law 3,372) it costs for a seven-roomed house with five inmates \$6, and \$5 extra for bath and closet, or a total of \$11 gross, twenty per cent. off for prompt payment would bring the net rate to \$8.80 per annum. The assessment for a seven-roomed house would average about \$1500, and if the water rates were collected with the general taxes, the amount to be raised would be \$359,000, or less than three and three-quarters of a mill on an assessment of \$132,000,000, or less than

\$4.13

for a seven-roomed house and five inmates under the new system, as against \$8.80 under the present system; but under the proposed agreement the city would have thirty million gallons per day, as against a very doubtful seventeen million gallons per day now. Under the proposed agreement each citizen could use water without stint, and none would be wasted. The water that escaped the taps would flush and purify the sewers, and improve the sanitary condition of the city. Fountains could play in every park and on every public square, and our city be a model of health and beauty, and beauty has a cash value.

NO METERS.

We do not want meters. They cost from \$15 to \$20 each to put in. They cost the consumer 75c. quarterly (\$3.00 a year) for inspection. The best sanitary conditions are promoted by the free and abundant use of pure water; meters tend to restrict consumption and militate against cleanliness and health.

The acceptance of the company's offer would insure the speedy completion of the ship canal and power development features of the company's work. These works would give employment to thousands of men during construction, but unlike other great works its completion would not leave upon our hands an abnormally congested labor market, as the use of the power to be developed would give continuous employment to more persons than would be engaged in the construction.

Mr. L. E. Cooley, the great engineer, claims that one horse-power of water will employ directly and indirectly from three to five persons. The power aqueduct will develop over

400,000 HORSE POWER

in and about Toronto, which, according to Mr. Cooley's rule, would mean an increase of over a million in our population. Why do we judge ourselves unworthy of these great blessings? Why should ignorance and lack of faith be such a bar to our progress and development? We would have no just cause for complaint if we were to be dealt with according to our faith, and our city and country be allowed to decay of

DRY ROT

while other people avail themselves of natural advantages that we reject and without which we cannot compete with the world.

The Aqueduct Company is not in any sense a charitable organization, nor is this reference to the laboring man's interests intended as an appeal to the charitably inclined. The primary object of the company is to make money for its shareholders, and not to

"GIVE WORK."

Reference to the unemployed is not, as has been urged, a mere playing upon the feelings of a distressed community. It is on the other hand a legitimate phase of the question to be considered by the community, particularly since it has been clearly demonstrated that the company is entitled to the contract it seeks, according to every commercial, sanitary and economic law known to men.

City Hall Book-Keeping!

The City Treasurer's reports for years back have shown a surplus of revenue over expenditure for the waterworks department. For the last four or five years it has averaged about \$40,000. This alleged surplus has been entirely consumed for several years back in extraordinary repairs to the conduit across the Bay. Let us see how this so-called profit is made up. We charge

The Public School Board,	-	-	\$	960
The Separate School Board,	-	-		290
General Hospital,	-	-	-	439
Fire Dept., Police Board, Street Water-				
ing, and other City Departments,				<u>87,000</u>
Total	-	-		\$88,689

That is, the City charges the City about \$90,000 a year for water supplied to the several departments. This is a mere

PADDING AND STUFFING

of the public accounts in order to deceive the people and make it appear that the Department is not only self-sustaining, but that it yields a profit. It is claimed that the City received \$439,172 for water rentals for 1895, the actual amount received was \$350,483.

When profits can be made so easily, why not increase the price to the departments and have a larger profit? We could show a million dollars of a surplus that way just as well as \$40,000. In fact there is no limit to the profits we might make (out of ourselves) without costing a cent more. The whole system is and always has been a most palpable fraud upon the citizens.